

**CPC****COOPERATIVE PATENT CLASSIFICATION****C11B**

**PRODUCING** (pressing, extraction), **REFINING AND PRESERVING FATS, FATTY SUBSTANCES** (e.g. lanolin), **FATTY OILS AND WAXES, INCLUDING EXTRACTION FROM WASTE MATERIALS; ESSENTIAL OILS; PERFUMES** (drying-oils C09F)

**NOTE**

In this subclass, boron and silicon are considered as metals

**C11B 1/00****Production of fats or fatty oils from raw materials**

- C11B 1/02 . Pretreatment
- C11B 1/025 .. {by enzymes or microorganisms, living or dead}
- C11B 1/04 .. of vegetable raw material {(C11B 1/025 takes precedence)}
- C11B 1/06 . by pressing
- C11B 1/08 .. by hot pressing
- C11B 1/10 . by extracting
- C11B 1/102 .. {in counter-current; utilisation of an equipment wherein the material is conveyed by a screw}
- C11B 1/104 .. using super critical gases or vapours
- C11B 1/106 .. {using ultra-sounds}
- C11B 1/108 .. {after-treatment, e.g. of miscellae}
- C11B 1/12 . by melting out
- C11B 1/14 .. with hot water or aqueous solutions
- C11B 1/16 .. with steam

**C11B 3/00****Refining fats or fatty oils**

- C11B 3/001 . {by a combination of two or more of the means hereafter}
- C11B 3/003 . {by enzymes or microorganisms, living or dead}
- C11B 3/005 . {by wave energy or electric current, e.g. electro dialysis}
- C11B 3/006 . {by extraction}
- C11B 3/008 . {by filtration, e.g. including ultra filtration, dialysis (C11B 3/005 takes precedence)}
- C11B 3/02 . by chemical reaction {(C11B 3/003 takes precedence)}

- C11B 3/04 . . with acids
- C11B 3/06 . . with bases
- C11B 3/08 . . with oxidising agents
- C11B 3/10 . by adsorption

**NOTE**

[B01D 15/08](#) insofar as subject matter of general interest relating to chromatography is concerned.

- C11B 3/12 . by distillation
- C11B 3/14 . . with the use of indifferent gases or vapours, e.g. steam
- C11B 3/16 . by mechanical means

**C11B 5/00 Preserving by using additives, e.g. anti-oxidants****NOTE**

In groups [C11B 5/0007](#) to [C11B 5/0092](#), in the absence of an indication to the contrary, a composition is classified in the last appropriate place

- C11B 5/0007 . {Organic substances}
- C11B 5/0014 . {Hydrocarbons}
- C11B 5/0021 . {containing oxygen}
- C11B 5/0028 . . {Carboxylic acids; Their derivates}
- C11B 5/0035 . . {Phenols; Their halogenated and aminated derivates, their salts, their esters with carboxylic acids}
- C11B 5/0042 . {containing nitrogen}
- C11B 5/005 . . {Amines or imines ([C11B 5/0035](#) takes precedence)}
- C11B 5/0057 . . {Amides or imides}
- C11B 5/0064 . . {Heterocyclic compounds containing nitrogen in the ring}
- C11B 5/0071 . {containing halogens, sulfur or phosphorus ([halogenated phenols C11B 5/0035](#))}
- C11B 5/0078 . {Metal hydrides or organo-metallic compounds, i.e. organic compounds containing a metal-to-carbon link}
- C11B 5/0085 . {Substances of natural origin of unknown constitution, f.i. plant extracts}
- C11B 5/0092 . {Mixtures}

**C11B 7/00 Separation of mixtures of fats or fatty oils into their constituents, e.g. saturated oils from unsaturated oils**

**NOTE**

In groups [C11B 7/0008](#) to [C11B 7/0091](#), in the absence of an indication to the contrary an invention is classified in the last appropriate place

- C11B 7/0008 . {by differences of solubilities, e.g. by extraction, by separation from a solution by means of anti-solvents (addition of a minor amount of solvent intended to lower the melting point [C11B 7/0083](#), [C11B 7/0091](#))}
- C11B 7/0016 .. {in hydrocarbons or halogenated hydrocarbons (in pressure liquefied gases [C11B 7/005](#))}
- C11B 7/0025 .. {in solvents containing oxygen in their molecule}
- C11B 7/0033 .. {in solvents containing other heteroatoms in their molecule}
- C11B 7/0041 .. {in mixtures of individualized solvents (water is not taken into account)}
- C11B 7/005 .. {in solvents used at superatmospheric pressures}
- C11B 7/0058 .. {in solvents or mixtures of solvents of different natures or compositions used in succession}
- C11B 7/0066 .. {between two or more non-miscible solvent phases}
- C11B 7/0075 . {by differences of melting or solidifying points}
- C11B 7/0083 . {with addition of auxiliary substances, e.g. crystallisation promoters, filter aids, melting point depressors, (if a characterised solution is formed [C11B 7/0008](#))}
- C11B 7/0091 . {non-solvents, e.g. water wherein the fat or oil is dispersed account a more washing out of fractions is not taken into}
  
- C11B 9/00**      **Essential oils; Perfumes** (synthesis of chemical substances [C07](#))
  
- C11B 9/0003 . {Compounds of unspecified constitution defined by the chemical reaction for their preparation}
- C11B 9/0007 . {Aliphatic compounds}
- C11B 9/0011 .. {containing S}
- C11B 9/0015 .. {containing oxygen as the only heteroatom}
- C11B 9/0019 ... {carbocyclic acids; Salts or esters thereof}
- C11B 9/0023 .. {containing nitrogen as the only heteroatom}
  
- C11B 9/0026 . {compounds containing an alicyclic ring not condensed with another ring}
- C11B 9/003 .. {the ring containing less than six carbon atoms}
- C11B 9/0034 .. {the ring containing six carbon atoms}
- C11B 9/0038 .. {the ring containing more than six carbon atoms}
  
- C11B 9/0042 . {compounds containing condensed hydrocarbon rings}
- C11B 9/0046 .. {containing only two condensed rings}
- C11B 9/0049 ... {the condensed rings sharing two common C atoms}

- C11B 9/0053 . . . . {both rings being six-membered}
- C11B 9/0057 . . . {Spiro compounds}
  
- C11B 9/0061 . {compounds containing a six-membered aromatic ring not condensed with another ring}
- C11B 9/0065 . . {Nitriles}
  
- C11B 9/0069 . {Heterocyclic compounds}
- C11B 9/0073 . . {containing only O or S as heteroatoms}
- C11B 9/0076 . . . {the hetero rings containing less than six atoms}
- C11B 9/008 . . . {the hetero rings containing six atoms}
- C11B 9/0084 . . . {the hetero rings containing more than six atoms}
- C11B 9/0088 . . . {Spiro compounds}
- C11B 9/0092 . . {containing only N as heteroatom}
- C11B 9/0096 . . {containing at least two different heteroatoms, at least one being nitrogen}
  
- C11B 9/02 . Recovery or refining of essential oils from raw materials
- C11B 9/022 . . {Refining}
- C11B 9/025 . . {Recovery by solvent extraction}
- C11B 9/027 . . {Recovery of volatiles by distillation or stripping}
  
- C11B 11/00** **Recovery or refining of other fatty substances, e.g. lanolin, waxes** ([synthetic waxes C07, C08](#); [mineral waxes C10G](#))
  
- C11B 11/005 . {Lanolin; Woolfat}
  
- C11B 13/00** **Recovery of fats, fatty oils, or fatty acids from waste materials** ([mechanical separation from waste water C02F, E03F](#))
  
- C11B 13/005 . {of residues of the fabrication of wood-cellulose (in particular tall-oil)}
- C11B 13/02 . from soap stock
- C11B 13/04 . from spent adsorption materials
  
- C11B 15/00** **Solidifying fatty oils, fats, or waxes by physical processes**